MLT FX Tracker Function

User Guide V5.3

This manual is revision A

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Contents

Tracker Menu

Overview 1–2

Tracker Menu 1–2
Opening & Closing the Tracker Menu 1–2
Tracker Settings 1–2
- View Source Option 1–2
- Zoom Preview Option 1–3

Tracker Method 1–3
Loading & Converting a Shape 1–3
- Automatically Convert and Load Shape 1–4
- Manually Convert and Load Shapes 1–5

Point Tracker 1–6
Point Tracker Menu Settings 1–6
- Adaptive 1–6
- Only 1–6
- Luma 1–6
- Display 1–6

Setting Points to Track 1–7
Tracking Points 1–8
Moving Track Points 1–8
Re-ordering Track Points 1–8
Point Settings 1–8
- Point 1–9
- Offset 1–9
- Match 1–9
- Search 1–9
- Lock 1–9
- All 1–9
- Horizontal or Vertical 1–9

Mocha Tracker 1–10
Mocha Settings Menu 1–10
- Offset 1–10
- Processes 1–11

Setting Points to Track 1–12
Point Settings 1–12

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Tracking Points 1–12
Moving Track Points 1–13
Re-ordering Track Points 1–13

Tracking a Section of a Segment 1–14

Tracking Stereo Media 1–14

Renaming Tracks 1–14

Saving Tracks 1–15

Deleting & Modifying Keyframes 1–15
Deleting Points & Tracks 1–15
Deleting Track Keyframes 1–15
Modifying Keyframes 1–16
Interpolated Keyframes 1–16

Using a Track

Using a Track with Shapes 2–2
Tracking options 2–2
Data 2–2
Points 2–2
Applying a Track to an Existing Shape 2–3
Using a Track to Create a Shape 2–3

Using a Track with DVE 2–4
Applying Tracking Data 2–4
1 Point Tracking/Image Stabilisation 2–5
2 Point Tracking 2–6
4 Point Tracking 2–6

Using a Track with Plug-ins 2–7
Applying Tracker Data 2–7

Tracker Settings Clips 2–8
Behaviour of Settings Clip Types 2–8
Loading & Naming Different Track Types 2–8

Contents

Locating tracker settings clips 2–9
Using Tracker Settings Clips to Create a Shape 2–10
Applying a Tracker Settings Clip 2–11
Using a Tracker Settings Clip in DVE 2–12
Using Tracker Settings Clips in Plug-ins 2–13

Appendices

Appendix A **A–2**
About This Manual A–2
Notices A–3
Maintenance A–3
Conventions Used A–3
Text A–4
Trademarks A–4
Disclaimer A–6
Helpdesk & Web Support A–6
24 Hour Helpdesk A–6
Website & Downloads (manuals, drivers, plugins & software) A–6

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Tracker Menu

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Overview

The tracker function allows you to record the movement of a single point, multiple points or a shape through a segment of video.

After recording a track, the data can be applied to a shape or an effect created in an MLT FX process menu or it can be used to create a shaped effect. This means the shape or effect follows the movement of the point(s) recorded through the video segment.

The tracker data can be used in a number of MLT FX process menus including **dve, key – garbage**, **graphics**, **blur – shaped**, **colour – selective – shaped** and **plug-ins**.

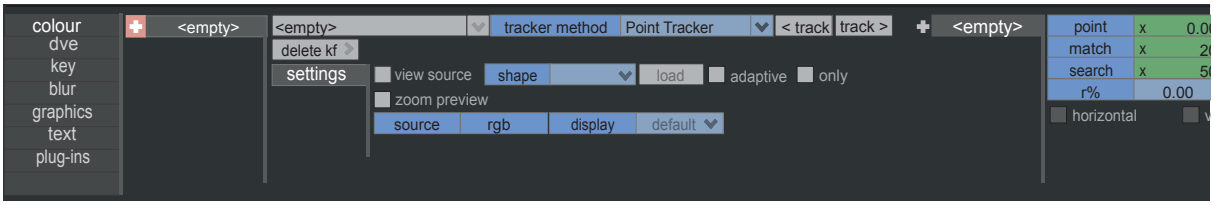
Tracker Menu

Opening & Closing the Tracker Menu

The tracker menu is located within the MLT FX menu. To access the tracker menu you must first open MLT FX by pressing **mlt fx** below the timeline area.

The **tracker** box is located beneath the Edit Window. Tick the **tracker** check box to open the tracker menu.

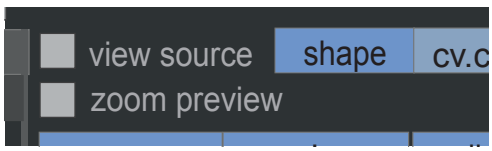
The tracker menu opens to the right of the MLT FX process stack. Any existing effects created in the MLT FX process menus can still be reordered or disabled while the tracker menu is open. The tracker menu has two main sections: the left section displays the overall tracker settings and the right section displays the individual point settings.



To close the menu again, simply deselect the **tracker** check box under the Edit Window.

Tracker Settings

View Source Option



The **view source** check box allows you to choose whether or not you want to view the source image only, with any existing effects turned off while the tracker menu is open.

For example, if a **dve** effect has been applied to the clip and you select **view source**, the original size and position of the image is displayed. The **dve** effect still exists but is not visible.

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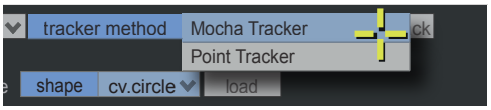
Zoom Preview Option

The **zoom preview** tick box allows you to choose whether or not you want to use a miniature zoom when you're placing a point to track. It is selected by default. When you have zoomed in to a high level on the Edit Window, the **zoom preview** option is automatically turned off.

See 'Setting Points to Track' for more details about placing points.

Tracker Method



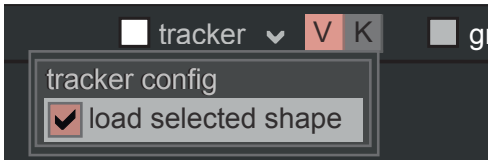
There are two tracking methods available: **Point Tracker** and **Mocha Tracker**. You can select the required method from the scroll box to the right of **tracker method**.

See 'Point Tracker' and 'Mocha Tracker' later in this chapter for more details.

Loading & Converting a Shape

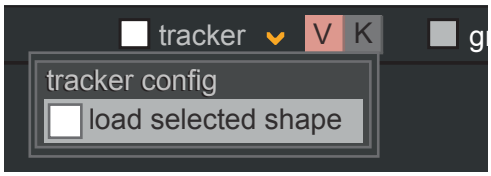
The tracker function allows you to load shapes in order to track them. You can choose whether to automatically load the shape using the tracker menu, or load the shape manually.

To load a shape automatically press the drop-down arrow next to the **tracker** box.



A **tracker config** menu appears below the **tracker** box. Tick the **load selected shape** check box to enable automatic loading.

If you do not want the current shape to load automatically in the tracker menu, deselect the **load selected shape** box.



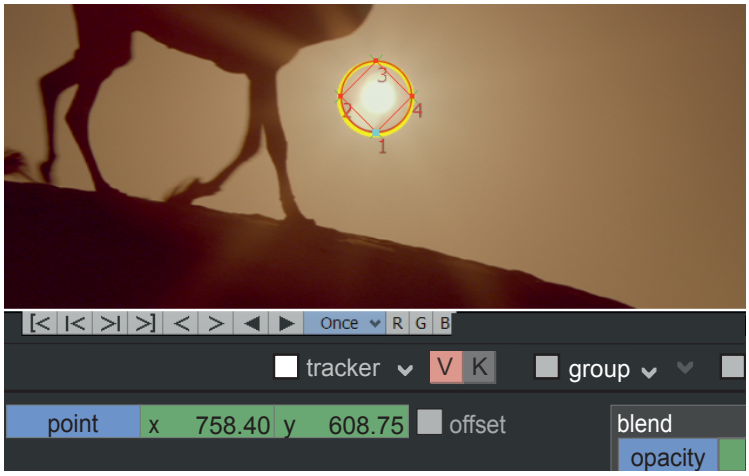
When the **load selected shape** box is deselected the drop-down arrow highlights orange.

If you hold down the <Ctrl> key when opening the tracker menu it overrides the current setting. For example, if **load selected shape** is selected, holding <Ctrl> when opening the tracker menu temporarily ignores the **load selected shape** option.

All shapes (except for curves) have to be converted to a curve to be able to track them. When you load a shape automatically, it is converted to a curve simultaneously with set points ready to track. If you load a shape manually, it must be converted to a curve prior to loading.

Automatically Convert and Load Shape

Any shape created in MLT FX can be automatically converted to a curve as long as all the following requirements are met:.



a Any objects that have been grouped together are split.

b Only one object is selected.

c The object you want to convert is currently selected.

If one or more of these requirements are not met, an error message displays and the shape is not converted.

To load a shape into the tracker and automatically convert it to a tracking shape, do the following:

1. Ensure **load selected shape** is selected from the tracker drop-down arrow under the Edit Window.
2. Select the shape you want to load.
3. Tick the tracker check box under the Edit Window to open the tracker. When the tracker menu opens, the selected shape is automatically converted to a curve. Each point of the curve is now a tracking point.

After a shape has been loaded into the tracker menu and converted to a tracking shape, the name of the track is updated to match the name of the shape with the prefix '**cv.**'

For example if you convert a circle to a track, the name of the track becomes '**cv.circle**'.

This track can then be renamed by clicking on the name box (as seen in this screenshot), typing a new name and pressing <Enter>.

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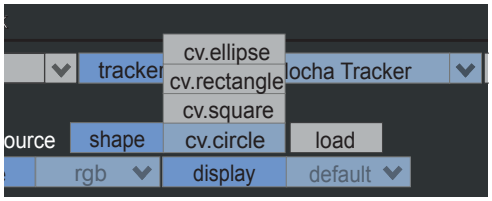
Manually Convert and Load Shapes

To manually convert a shape to a curve, do the following:

1. Select the shape.
2. Press transform in the shape settings menu.
3. Press to curve.

To load a shape from within the tracker menu, do the following:



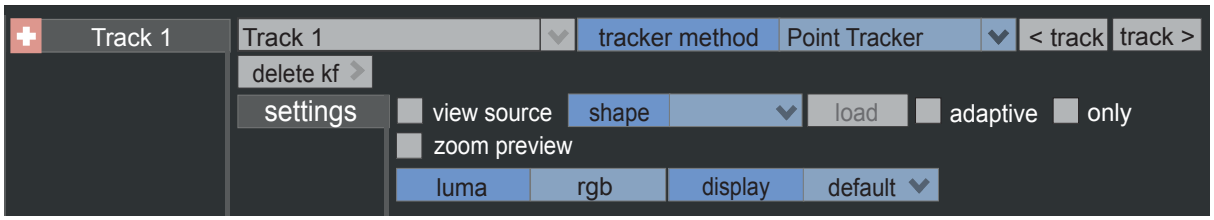
1. Ensure the shape you want to select has already been converted into a curve.
2. Select the required shape from the **shape** scroll box.
3. Press **load**. The shape is automatically converted to a track.

If you delete the original shape, the associated track is also deleted. If you make any changes to the original shape with the tracker menu, the changes are reflected in the track but are only updated in the shape after it is tracked.

Point Tracker

The **Point Tracker** method tracks the movement of one or multiple specified points through the video segment. Select the **Point Tracker** from within the **tracker method** scroll box.

Point Tracker Menu Settings



Adaptive

Ticking **adaptive** updates the search pattern at each frame in the clip to improve tracking on fast moving and fast changing images.

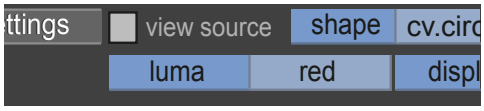
Only

Ticking **only** tracks only the currently selected point.

Luma

The box on the right of **luma** displays the selected luma channels being tracked.

This is controlled by the **R**, **G** and **B** buttons located directly below the Edit Window. By default, none of the channels are selected which means all the channels are being used.



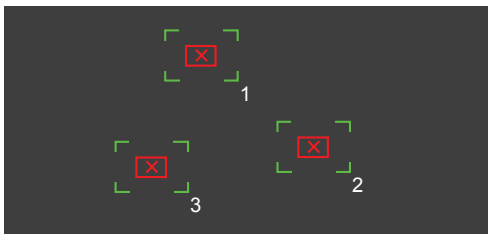
If one of the luma channel boxes is selected under the Edit Window, the **luma** box in the **tracker** menu displays the selected channel, eg **red**.

When all the channels are being used, the box to the right of **luma** displays **rgb**.

Display

The **display** scroll box allows you to choose how the set points are displayed in the Edit Window. The options are as follows:

default



The **default** option displays the match area (the inner red box with the 'x'), the search area (the area within the green brackets) and the number of each point.

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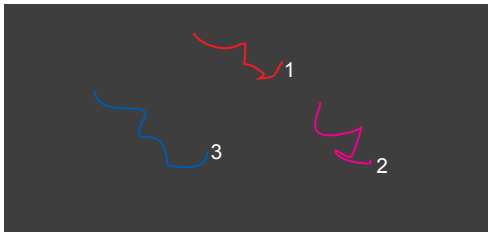
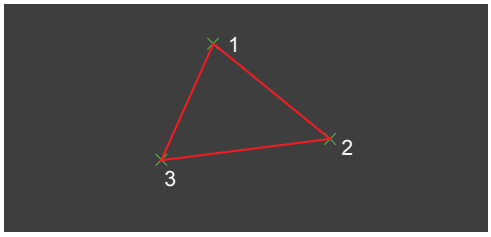
all



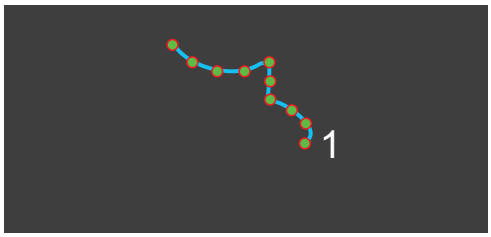
The **all** option displays the tracking paths that the points follow over the segment of video. This can only be displayed after the points have been tracked.

linked



The **linked** option displays the points connected in the order they were set.

track edit



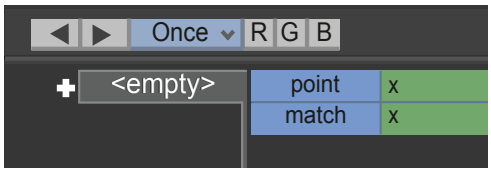
The **track edit** option displays the path and keyframes of the currently selected point. This can only be displayed after the points have been tracked. By default, only 10 keyframes are displayed.

When you select the **track edit** option an **all** check box appears which can be selected to show all the keyframes.

The keyframes can be dragged and dropped in different positions and the changes are then reflected in the track.

Setting Points to Track

To set a point for tracking, do the following:



1 Ensure the ✜ is selected to the left of the points stack (this displays **<empty>** if no points have been set).

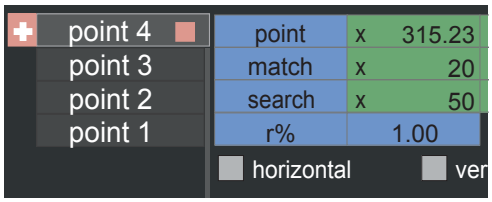
2 Hover the cursor over the Edit Window.

3 Click once on the area of the image where you want to place the track point.

To insert additional points simply repeat the procedure.

To place the point more accurately press and hold the cursor to display a temporary miniature zoom over the target area. When you release the cursor the miniature zoom disappears. If you do not want to use a miniature zoom, deselect the **zoom preview** check box in the **tracker** menu.

See 'Tracker Settings – Zoom Preview Option' previously in this chapter for more details.



After the points have been placed in the Edit Window, they are listed in the point stack in the tracker menu.

Tracking Points

You can track the selected points either forwards or backwards.

Press either **track >** or **< track** depending on the direction in which you want to track. This tracks the points to the beginning or end of a segment.

After you press **track**, the box toggles to **stop**. Press this at any time to stop the tracking process.

You can also press <spacebar> on the keyboard to stop the tracking process.

Moving Track Points

You can move existing track points either before or after tracking. Any changes made to points after being tracked are automatically updated and reflected in the track. To move a point do one of the following:

a Select the point you want to move from the point list. Change the **x** and **y** values in the green boxes to the right of the list of points.

b Deselect the ✜ to the left of the point list. Select the point you want to move. In the Edit Window, click on the new location for the point.

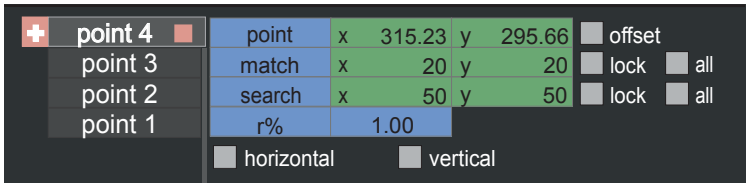
c In the Edit Window select the point you want to move and drag it to the new location.

Re-ordering Track Points

Points can be re-ordered before or after being tracked. When points are re-ordered after being tracked, the track data is automatically updated.

To re-order track points, use the list of points in the tracker menu. Simply drag one of the boxes, eg point 4, up or down the list, eg below point 2. The point numbers change accordingly and the tracking data is automatically updated.

Point Settings



The settings for the currently selected point are displayed to the right of the points list.

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Point

The **point** settings display the **x** and **y** positions of the currently selected point. You can change these by adjusting the values in the green boxes or by adjusting the points manually on the image itself.

See 'Moving & Re-ordering Track Points' further in this chapter for more details about how to move points manually.

Offset

Ticking **offset** allows you to create offset tracking points that act as reference points for the original tracking points. For example, if one of the original tracking points passes behind an object in the image, offset points can be added to objects in the image that remain visible. The tracking data generated by the offset points are then applied to the original shape.

To create offset points, tick the **offset** box and then tap on the object in the image that you want to act as a reference point. If you want to offset multiple points, you must offset each point individually, ie select **offset** for each point. Note that the offset shape does not need to have the same number of points as the original shape; it can have the same number of points or fewer than the original shape.

Match

The **match** setting allows you to adjust the dimensions of the area you are tracking (within the inner red box with an 'x').

Search

The **search** setting allows you to adjust the area in which to search for a **match** (marked with the green brackets).

Lock

Select **lock** to the right of the **match** and **search** settings to lock the **x** and **y** values together, forcing them to have the same value. For example, if you change the value of **x** to 20 when **lock** is selected, the value of **y** is automatically changed to 20.

All

Select **all** to the right of the **match** and **search** settings to apply the settings to all the points simultaneously.

Horizontal or Vertical

You can choose to track only the **horizontal** or **vertical** movement of a point. To do this select the movement that you want to track using the tick boxes. For example to track only the vertical movement of a point, tick **vertical**.

Mocha Tracker

The Mocha Tracker is designed to track an area as determined by the active shape from any effects module or as defined from within the tracker itself.

It differs from the point based tracker in that the whole area bounded by all the points is tracked, instead of only the points.

The **Mocha Tracker** method tracks the movement of a whole shape specified with points (minimum of 3 points connected) through a video segment. This is also known as a Planar Tracker.

Mocha Settings Menu

After selecting **Mocha Tracker** from the **tracker method** scroll box, select **mocha** in the tracker menu to access additional settings.

min % pixels used — Allows you to define the percentage of pixels used in the track. If you leave this as 0, it uses the Mocha default. The higher the percentage, the slower the tracking process becomes but it can improve the quality of the track.

smoothing level — Allows the track process to be smoothed by blurring the original image before tracking. For example, if the track is jittery, set the smoothing level to a high number to blur the jittering, which provides a smoother track.

Offset

Ticking **shape offset** allows you to create offset tracking points that act as reference points for the original tracking points. For example, if one of the original tracking points passes behind an object in the image, offset points can be added to objects in the image that remain visible. The tracking data generated by the offset points are then applied to the original shape.

Note that the offset shape does not need to have the same number of points as the original shape. The offset shape can have the same number of points or fewer than the original shape.

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Processes

The following check boxes give you the option of what processes to track. Note that these are accumulative from **translation** to **perspective** and cannot be ticked individually. The more processes you select to track, the slower the tracking process is.

Option	Description
translation	Tracks only the movement of **x** and **y** positions of the shape.
scale	Scales/resizes the shape throughout the track.
rotation	Adjusts the angle of the shape if it rotates.
shear	Tracks any distortion in the shape if it turns away from or towards the camera.
perspective	Adjusts the shape if it moves in perspective relative to the camera.

Maximum Value Settings

The numerical boxes to the right of the point setting options allows you to set the maximum amount of movement allowed by the tracking point per frame. Setting maximum values helps to ensure that the tracking point remains on target. The maximum setting options are as follows:

Option	Description
horizontal	Sets the maximum **x** movement in pixels allowed by the tracker per frame, eg if **x** is set to 10, **x** can only move a maximum of 10 pixels left or right per frame. 0 means no maximum value is set.
vertical	Sets the maximum **y** movement in pixels allowed by the tracker per frame, eg if **y** is set to 10, **y** can only move a maximum of 10 pixels up or down per frame. 0 means no maximum value is set.
angle	Sets the maximum angular rotation in degrees allowed per frame. 0 means no maximum value is set. Setting a maximum angle rotation is used only if there is a high shape rotation in the track.
zoom	Sets the maximum scaling in percent allowed per frame, eg if the zoom is set to 10, a shape can only be scaled 10 % larger or smaller per frame. 0 means no maximum value is set.

Setting Points to Track

To set a point for tracking using the Mocha Tracker, do the following:

1 Ensure the ✜ is selected to the left of the points stack. If no points have been set, **<empty>** is displayed by default.

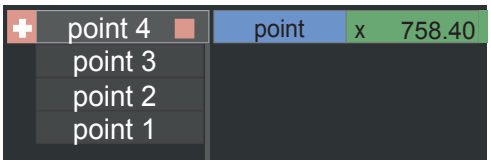
2 Hover the cursor over the Edit Window.

3 Click once on the area of the image where you want to place the track point.

To insert additional points simply repeat the procedure.

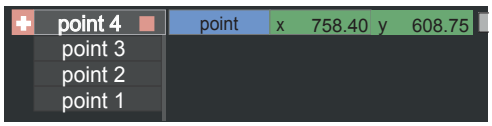
When you place points using the **Mocha Tracker** method, the points are automatically joined to form a whole shape.

'Mocha Tracker' must have at least 3 points in order to function.



After the points have been placed in the Edit Window, they are listed in the point stack in the tracker menu.

Point Settings



The **point** settings display the **x** and **y** positions of the currently selected point.

You can change these by adjusting the values in the green boxes or by adjusting the points manually on the image itself.

See 'Moving & Re-ordering Track Points' later in this chapter for more details about how to move points manually.

Tracking Points

You can track the selected points either forwards or backwards.

Press either **track >** or **< track** depending on the direction in which you want to track. This tracks the points to the beginning or end of a segment.

After you press **track**, the box toggles to **stop**. Press this at any time to stop the tracking process.

You can also press <spacebar> on the keyboard to stop the tracking process.

During the track, the shape effect does not appear to move or change but the wire frame of the track does. After the tracking is complete the shape movement is updated throughout the video segment.

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Moving Track Points

You can move existing track points either before or after tracking. Any changes made to points after being tracked are automatically updated and reflected in the track. To move a tracking point do either of the following:

a Select the point you want to move from the point list and use the **x** and **y** settings to reposition the track point.

OR

b Select the point from the Edit Window and drag to a new position.

Re-ordering Track Points

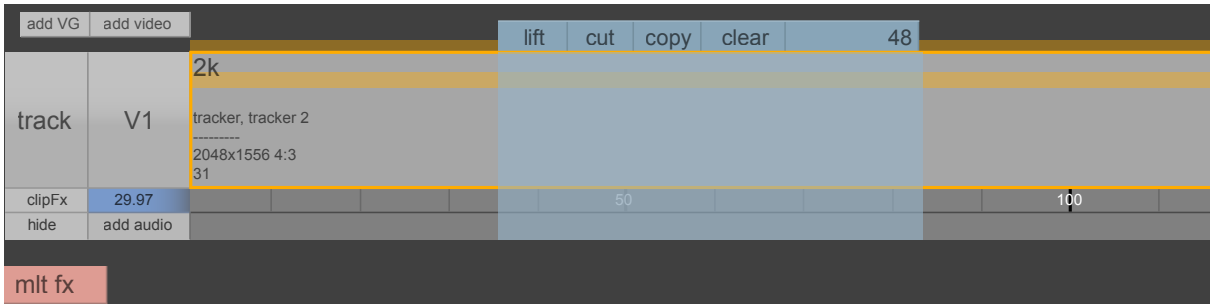
Points can be re-ordered before or after being tracked. When points are re-ordered after being tracked, the track data is automatically updated.

To re-order track points, use the list of points in the tracker menu. Simply drag one of the boxes, eg point 4, up or down the list, eg below point 2. The point numbers change accordingly and the tracking data is automatically updated.

Tracking a Section of a Segment

You can use the tracker function to track a specified section of a segment as follows:

1 Insert 'in' and 'out' points of the section you want to track. You can do this by either using the <i> and <o> keys on the keyboard or pressing on the timeline and using the **in** and **out** buttons.



2 Place the timeline cursor where you want to begin tracking (within the highlighted section).

3 Press either **track** > or < **track** according to the direction in which you want to track. This now tracks to either the in or out point of your marked section.

Tracking Stereo Media

To track stereo media, you must select one eye only in the Edit Window.

Use the eye selectors (**L** and **R**) below the Edit Window to select either the left or right eye before creating a track.

If the eye selection is changed after tracking, the active tracking data is transferred to the newly selected eye.

Renaming Tracks

When a track is initially created, before any points are set, the track name displays **<empty>**. When points are set, the track is automatically saved with a default name, eg **track 1**.

When tracking stereo media, the default track name includes a prefix signifying which eye has been tracked, eg 'L track 1' signifies the tracking data has been recorded on the left eye.

You can change the name of the saved track by pressing on the name, eg **track 1** and using the external keyboard to enter a new name or by pressing on the arrow to the right of it and using the soft keyboard to enter a new name.

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Saving Tracks

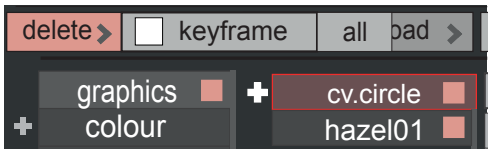
To save the track into the Settings Bin, do the following:

1. Select the track to be saved.
2. Open the Settings Bin, by pressing on the **settings** tab on the Application bar. Note, that when a track is selected, the Settings Bin tab displays: **settings/MLTTracker.**
3. At the bottom of the Settings Bin, select **save.** Ensure that **MLTTracker** is displayed to the right of the **save** box.
4. Enter a name for the track and press **end** or the <Enter> key.

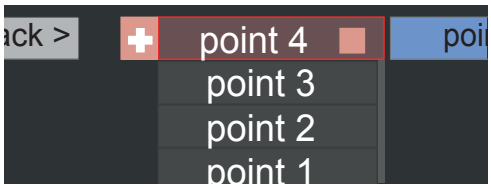
The track is now saved into the Settings Bin as a setting.

Deleting & Modifying Keyframes

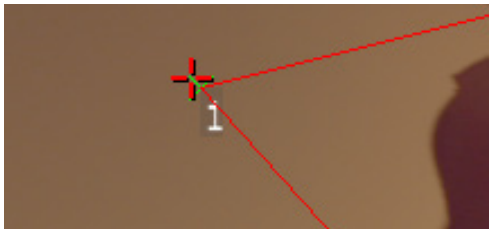
Deleting Points & Tracks



To delete a whole track, press **delete** in the top-left of the timeline menu area and then press on the track name you want to delete. The track is deleted immediately.



To delete a point in a track, select **delete** in the top-left of the menu area (or **delete kf** in the **tracker** menu) and then press on the point you want to delete from the list of points on the right side of the **tracker** menu.



Points and offset points can also be deleted by pressing **delete** and then pressing on the individual points in the Edit Window. When delete is enabled, the cursor becomes red when hovering over a point. Press on **delete** again to disable the delete mode.

Deleting Track Keyframes

The **tracker** menu allows you to delete one, a selection or all keyframes of a track.

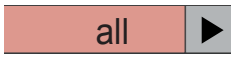
Press **delete kf** to show all the options.

Deletes the current keyframe of the currently selected point. You can delete the current frame for all the points by pressing **all** then **current**.

Deletes all the keyframes of the selected point in the selected track, to the left of the current timeline cursor position.

Deletes all the keyframes of all points in the currently selected track to the left of the current timeline cursor position (first press **all** and then the direction you want to delete).

Deletes all the keyframes of the selected point in the selected track, to the right of the current timeline cursor position.



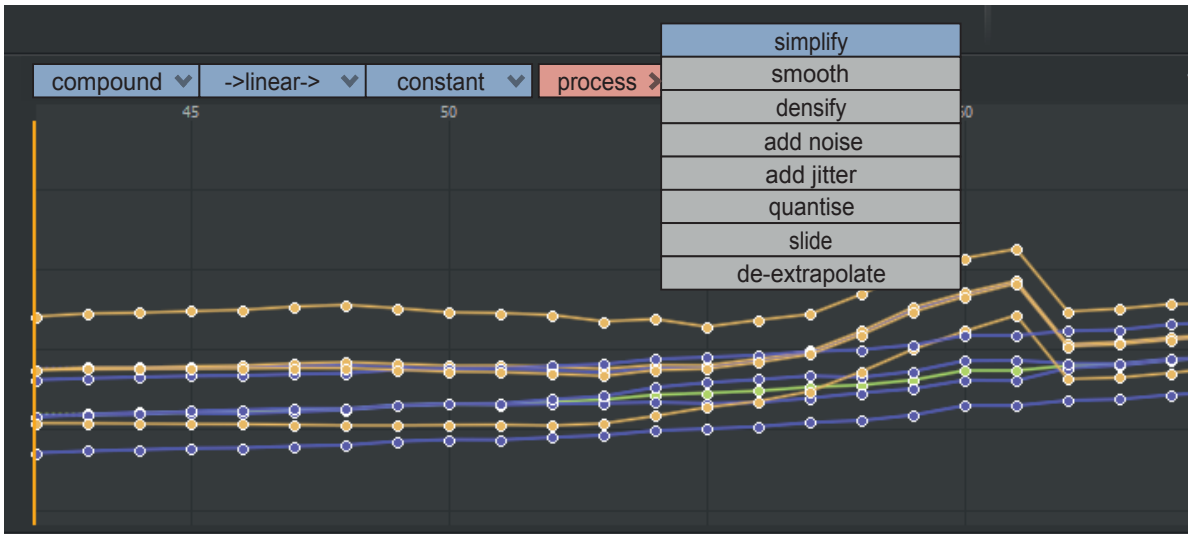
Deletes all the keyframes of all points in the currently selected track to the right of the current timeline cursor position (first press **all** and then the direction in which you want to delete).

Deletes the keyframes of all points in the currently selected track, therefore deleting the track.

Deletes all keyframes of points in all the tracks, therefore deleting all the tracks.

Modifying Keyframes

Keyframes can be modified to adjust the points within a track or the whole track itself. A row of nodes represents the keyframes for one point. Each node can be deleted or dragged to a different position which is then reflected in the tracking data displayed in the Edit Window.



You can use the keyframe **process** options to adjust the tracking path, eg selecting **smooth** makes the movement of the track smoother.

See the MLT FX User Guide for a full description of keyframe functions.

Interpolated Keyframes

When applying processed keyframes, the intermediate positions with no keyframes have their values interpolated or extrapolated and also take into account the curvature of the interpolation to provide keyframes values. This creates keyframe data for all frames in the keyframe range including missing values.

Note that this only applies to MLT Tracker data and not to Effects tracker data or Mocha XML tracker data.

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Using a Track

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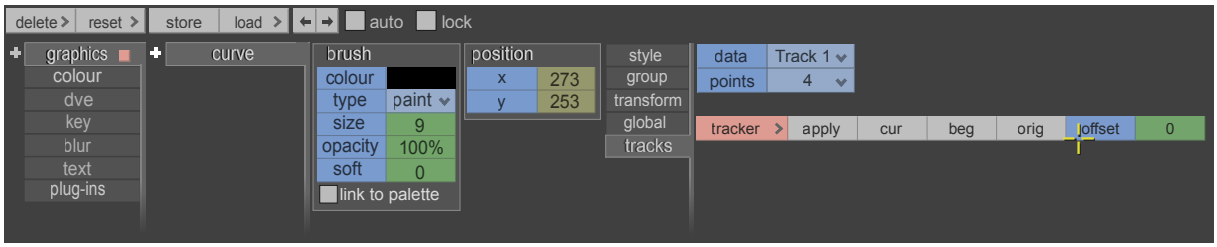
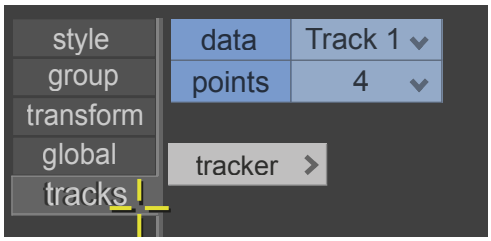
Using a Track with Shapes

Tracking options

Tracking data can be applied to shapes or shaped effects within the **colour**, **key**, **blur** and **graphics** process menus.



Within each shape menu (**colour**, **key**, **blur** and **graphics)** the available tracking options are the same. Each shape process menu has options to apply existing tracking data and additional options to establish how the track is applied to the shape.



After a shape has been created, additional options appear in the shape menu that allow you to edit the shape. At the bottom of the right-hand column of shape options is a **tracks** box. Press this to display the tracking options that can be applied to the selected shape.

Tracking options available include:

Data

The **data** scroll box allows you to select which track you want to apply. If you have multiple tracks available then you can use the scroll box to select the required track.

Points

The **points** scroll box allows you to select the point tracking data you want to apply. In all menus except **dve**, the tracking data is applied from a single point which is selected from this scroll box.

Tracker

Pressing **tracker >** to open a series of additional options for applying the tracking data to the shape. The options are as follows:

apply	Pressing **apply** applies the tracking data to the selected shape.
cur	With **cur** selected the tracking data is applied from the current frame.
beg	With **beg** selected the tracking data is applied from the beginning of the current segment.
orig	With **orig** selected the tracking data is applied based on the original tracking position. For example, if the track is created starting from frame 8 then the track is applied to frame 8 of the current segment.

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offset 0

The **offset** setting allows you to have more control over exactly where the track is applied from.

For example, if you select **beg** to start the track at the beginning of the segment but you want the track to start 10 frames after the start, you can enter 10 into the **offset** value box. The offset value range is limited by the length of the timeline clip in negative and positive values.

The default selection is to use the first frame of the original tracking data with an offset of 0, except in **graphics** where the default selection is the current frame.

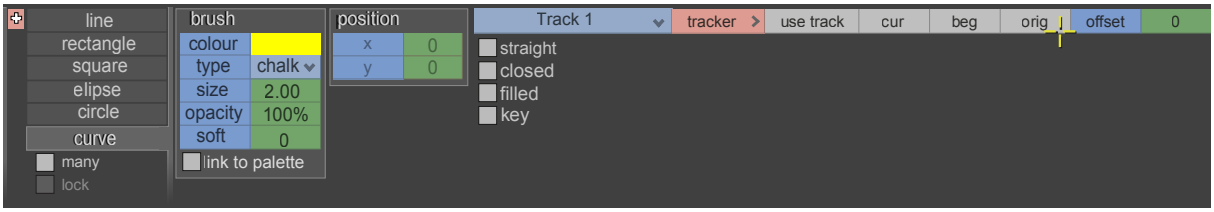
Applying a Track to an Existing Shape

To apply a track to a shape in the **key – garbage** menu, the **graphics** menu, the **blur – shaped** menu or the **colour – selective – shaped** menu do the following:

1. Select the shape that you want to apply the track to, eg a **curve** shape that has been produced in the **graphics** menu.
2. Select the **tracks** option in the far right column.
3. Use the **data** scroll box to select the track you want to apply, eg **Track 1**.
4. Use the **points** scroll box to select the point that you want to use the tracking data from.
5. Press on the **tracker >** box.
6. Select the required options for the track.
7. Press **apply**. The shape now moves with the applied track through the video segment.

Using a Track to Create a Shape

Tracking data can also be used in the **colour**, **key**, **blur** and **graphics** process menus to create a shape or a shaped effect which then automatically follows the tracking data. For example, in the **graphics** menu you can create a tracked shape by doing the following:



8. Select the shape you want to create, eg **curve** (you can only select **curve** or **line**).
9. Use the blue track scroll box to select the track you want to use, eg **Track 1**.
10. Press **tracker >** and select the required tracking options from the menu that appears (see previous section for descriptions of these options).
11. Press **use track** to create the tracked shape.

Creating a line requires tracking data with at least 2 points and creating a curve requires tracking data with at least 3 points. If the tracking data does not contain the required number of points for the shape you are creating, the use track button is not available (ie, greyed out).

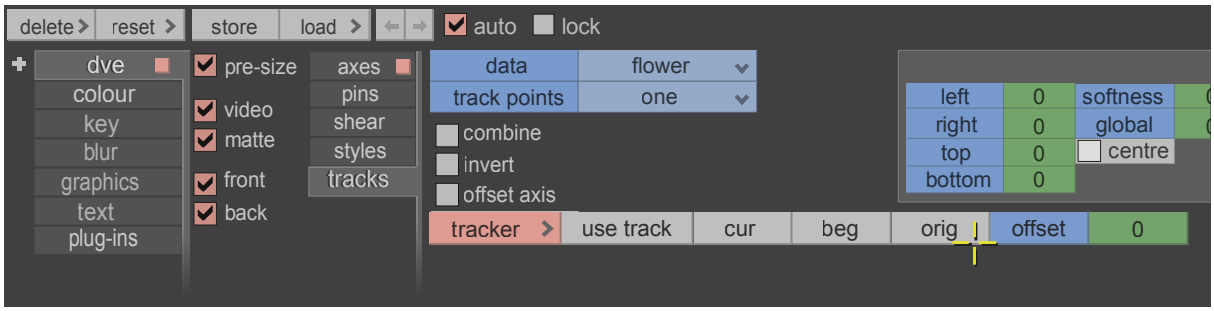
Using a Track with DVE

Applying Tracking Data

You can use tracking data to create a new **dve** effect or apply tracking data to an existing **dve** effect.

To apply a track to either an **axes** or a **pins** effect or to create a tracked **dve** effect, do the following:

1 Select the **tracks** option in the **dve** menu



2 Use the **data** scroll box to select the track you want to apply.

3 To apply the track settings to an existing **axes** effect, only select **one** point in the **track points** scroll box. To apply the track settings to an existing **pins** effect, select **four** points in the **track points** scroll box.

4 Press **tracker** > and select the required tracking options from the menu that appears (see Tracking Options in the previous section for descriptions of these options).

5 When the appropriate options have been selected, press **use track**.

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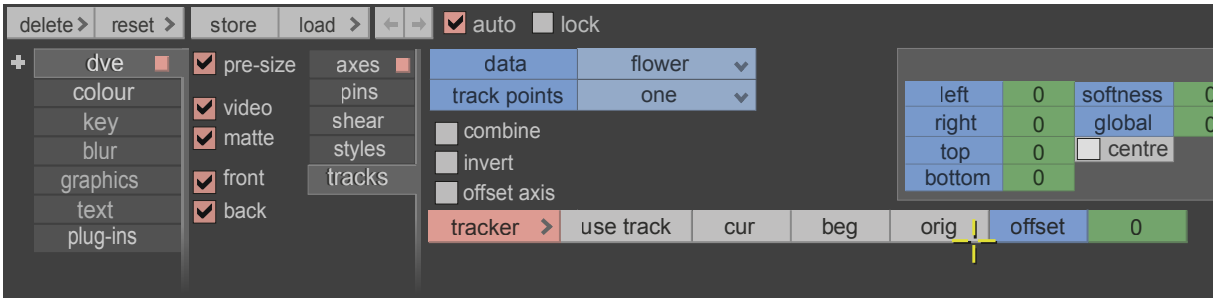
1 Point Tracking/Image Stabilisation

1 point tracking data can be used to stabilise horizontal and vertical movement artefacts that are detected between the target and a fixed point on the screen (the position of the target on the first frame of the track). This is useful when the foreground image needs to follow only horizontal and vertical movement of the track point, eg to allow a foreground clip to follow the vertical and horizontal movement of a track point on the background clip.

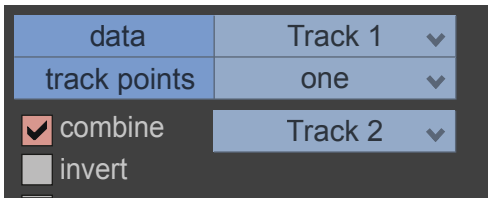
To stabilise an image do the following:

1. In the **tracker** menu, select **point tracker** from the **tracking method** scroll box.
2. Select a suitable point on the clip to stabilise. The point (target) chosen should have both horizontal and vertical image detail and be an element (for example a building) that is fixed horizontally and vertically.
3. Press either **track >** or **< track** depending on the direction in which you want to track.
4. Once the track has finished processing it is given a default name, ie **Track 1**. You can rename it by pressing on the default name.
5. Close the **tracker** menu.
6. Open the **dve** menu and select the **tracks** box in the far right column.

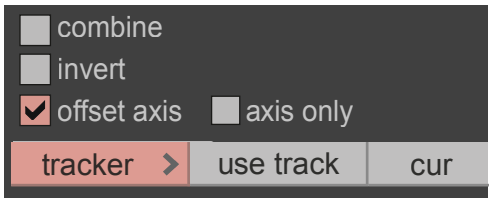


7. Select the track from the data scroll box.
8. Ensure **one** is selected in the **track points** scroll box.
9. Tick the **invert** check box.
10. Press **tracker >** to open the tracking options and select the required options.
11. Press **use track** to apply the track and stabilise the movement in the image.

For major movement artefacts the stabilised clip can be resized and repositioned as required.



When 2 layers with 2 different tracking paths need to be stabilised together, tick the **combine** check box and select the track data that you want to combine from the **data** scroll box to the right of **combine**. This stabilises the second layer with the first.



The **offset axis** box allows the foreground image to be offset from the tracking point. The **axis only** box allows the axis to follow the tracking point while the images remain fixed.

2 Point Tracking

This is useful where the foreground image needs to follow horizontal and vertical movement, size change as well as rotation between the two track points. To use 2 point tracking data in **dve**, select 2 points from the scroll box to the right of **track points** in the **tracks** menu.

4 Point Tracking

This is used to track four points (normally a rectangle) on the background clip and create a tracking path with horizontal and vertical movement, size change, rotation and change in perspective. To use 4 point tracking data in **dve**, select 4 points from the scroll box to the right of **track points** in the **tracks** menu.

The **pin offset** box allows the position of the four corner points on the foreground video track to be moved from their default positions. This is useful if they need repositioning or if the foreground image needs to be larger than the area defined by the tracking points.

When using tracking data with DVE corner pins, you must ensure the first point of the track is in the top-left corner with subsequent points placed in a clockwise direction. The points can be re-ordered to achieve this: see 'Moving & Re-ordering Track Points' in Chapter 1 for more details.

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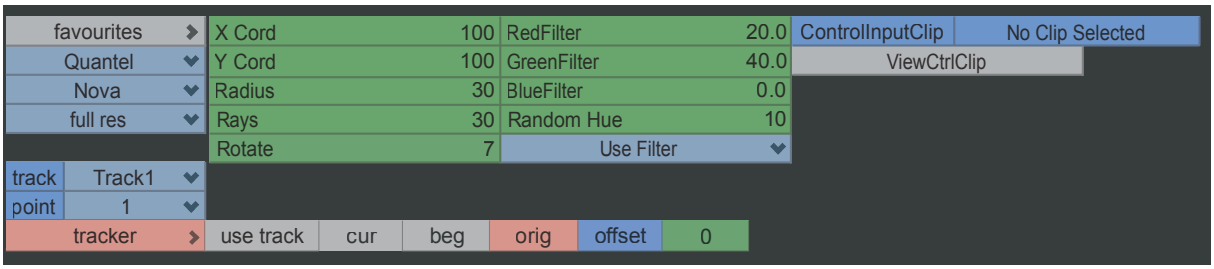
Using a Track with Plug-ins

Applying Tracker Data

You can use tracking data with a number of plug-ins including the Quantel **Crash Zoom**, **Kaleidoscope**, **Magic Crystal**, **MeshWarp**, **Nova**, **Ripple**, **Transition** and **Whirl Pinch** plug-ins. When you open the **plug-ins** menu a track settings menu appears.



To apply a track to a plug-in do the following:

1. Select the plug-in you want to use, eg **Nova**.
2. Adjust the plug-in settings accordingly.
3. Select the track you want to apply from the **track** scroll box.
4. Select the point that you want to use the tracking data from in the **points** scroll box. Only the data from the selected point is applied.
5. Press **tracker >** and select the required tracking options from the menu that appears (see previous section).
6. Press **use track**. The plug-in effect now uses the movement of the selected track.

Tracker Settings Clips

Each track can be saved as a settings clip in the settings bin. Tracker settings clips can be used in the **colour – shaped**, **key – garbage**, **graphics**, **blur – shaped**, **plug-ins**, **dve – axes** and **corner pins** processes. There are a number of ways tracker settings clips can be used:

a Tracker settings clips can be used to create a shape or a shaped effect (**line** or **curve**).

b Tracker settings clips can be applied to an existing shape or shaped effect.

c Tracker settings clips can be used to create 1, 2 and 4 point **dve** effects.

Behaviour of Settings Clip Types

There are three different types of tracker settings clips that can be used in MLT FX: MLT FX settings clips, Effects settings clips and Mocha exported corner pin XML files.

Loading & Naming Different Track Types

The different types of tracker settings clips are loaded in different ways. Also, the name of the tracking data displayed in the process menu depends on the type of tracker settings clip used.

MLT FX To load an MLT FX settings clip, drop it onto the Edit Window. MLTX FX settings clips take the name from the title of the track(s) within the settings clip.

Effects To load an effects settings clip, drop it onto the track box in the required MLT FX process menu. Effects clips take the name from the title of the settings clip.

XML files To load an XML file, drop it onto the track box in the required MLT FX process menu. XML files take the name from the title of the XML file.

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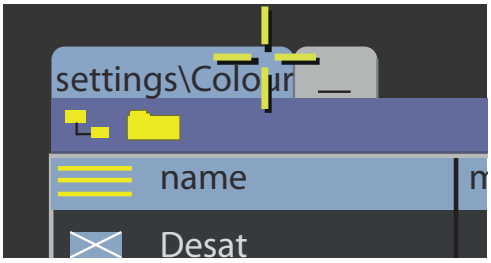
Locating tracker settings clips

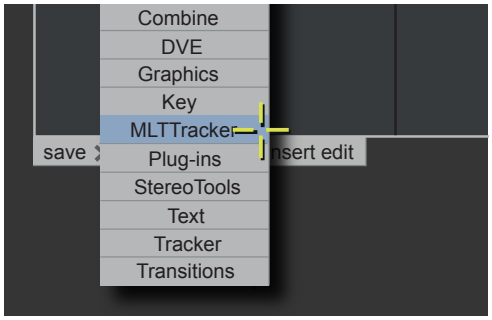
All settings clips are stored in the Settings Bin. There are a number of ways to locate a specific type of settings clip ie Tracker or MLT Tracker.

When you are in a process menu in MLT FX the Settings Bin tab on the Application bar reflects this. For example, if you are in the colour menu the Settings Bin tab displays **settings/colour**.

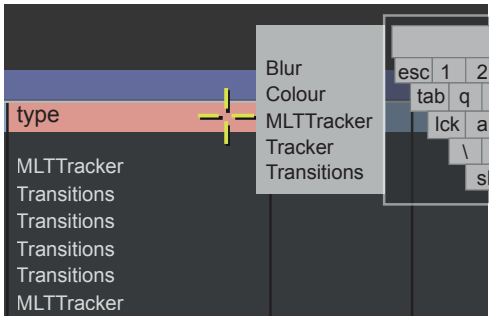
When you first open the settings bin, only the settings clips for the current process are displayed. To locate tracker settings clips, open the Settings Bin and do one of the following:



a Double tap on the Settings Bin name tab at the top of the bin. Doing this displays ALL available settings clips instead of just the settings clips for the current process menu (eg colour settings).



b If you want to display MLT FX tracker settings clips only, then use the blue scroll box at the bottom of the Settings Bin to select MLT Tracker.



c Alternatively ensure that the Type column is enabled. Tap on the **type** tab and select MLTTracker form the list that appears.

Using Tracker Settings Clips to Create a Shape

You can use tracker settings clips to create a shape (**line** or **curve**) or a shaped effect in the **colour**, **key**, **blur** and **graphics** process menus.

To create a shaped colour effect using a tracker settings clip, do the following:

1. Open the **colour** process menu**.**
2. Press **selective** and then **shaped**.
3. Select **line** or **curve**.
4. In the far right column a blue box appears which currently has no data. Next to it is a **tracker >** box which is greyed-out as there is currently no tracking data to use.
5. Open the Settings Bin and locate the tracker settings clip you want to use.
6. Drag and drop the tracker settings clip onto the Edit Window. The blue box now updates with the name of the track. See 'Behaviour of Settings Clips Types' previously in this chapter for details of loading different settings clips.
7. Press **tracker >** and select the relevant options
8. Press **use track.**

Note that creating a **line** requires tracking data with at least 2 points and creating a **curve** requires tracking data with at least 3 points. If the tracking data does not contain the required number of points for the shape you are creating, the use track button is not available (ie greyed out).

MLT FX tracker settings clips may contain more than one track. In this case all tracks appear in the blue scroll box when the clip is dropped on the Edit Window. Select the track you want to use from the scroll box and then press 'use track'.

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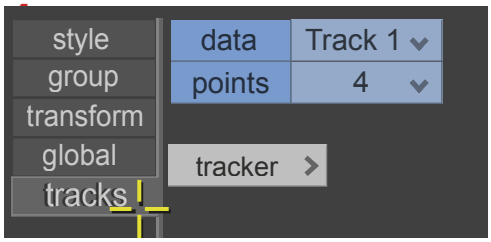
Applying a Tracker Settings Clip

You can apply tracker settings clips to existing shapes or shaped effects within the **colour**, **key**, **blur** and **graphics** menus.

For example, to apply a tracker settings clip to a shaped colour effect, do the following:

1. Within the **colour-selective-shaped** menu, select the shape you want to apply the track to.
2. Open the Settings Bin. Locate the tracker settings clip you want to apply.
3. Drag and drop the tracker settings clip onto the Edit Window. A new **tracks** box appears under the shape options stack. See 'Behaviour of Settings Clips Types' previously in this chapter for details of loading different settings clips.



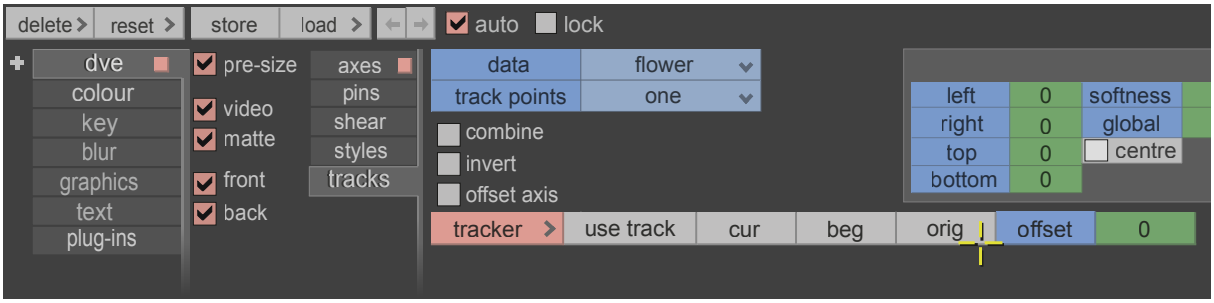
4. Press **tracks**. The name of the track is displayed in the scroll box to the right of **data**.
5. Select the point that you want to use the tracking data from in the **points** scroll box.
6. Press on the **tracker** > box and select the required tracking options from the menu that appears.
7. Press **apply**.

Using a Tracker Settings Clip in DVE

You can use a tracker settings clip to create a new **dve** effect or apply it to an existing **dve** effect.

To apply a tracker settings clip to either an **axes** or **pins** effect, do the following:

1 Select **dve – tracks**.



2 Open the Settings Bin and locate the tracker settings clip you want to use.

3 Drag and drop the tracker settings clip onto the Edit Window. The name of the track automatically appears in the **data** scroll box. See 'Behaviour of Settings Clips Types' previously in this chapter for details of loading different settings clips.

4 To apply the track settings to **axes** only select **one** point in the scroll box to the right of **track points**. To apply the track settings to **pins** select **four** points from the scroll box to the right of **track points**.

5 Press **use track**.

See 'Using a Track with DVE' in the previous section for more details of using 1, 2 and 4 point tracking.

When using tracking data with DVE corner pins, you must ensure the first point of the track is in the top-left corner with the following points placed in a clockwise direction. The points can be re-ordered to achieve this: see 'Moving & Re-ordering Track Points' in chapter 1 for more details.

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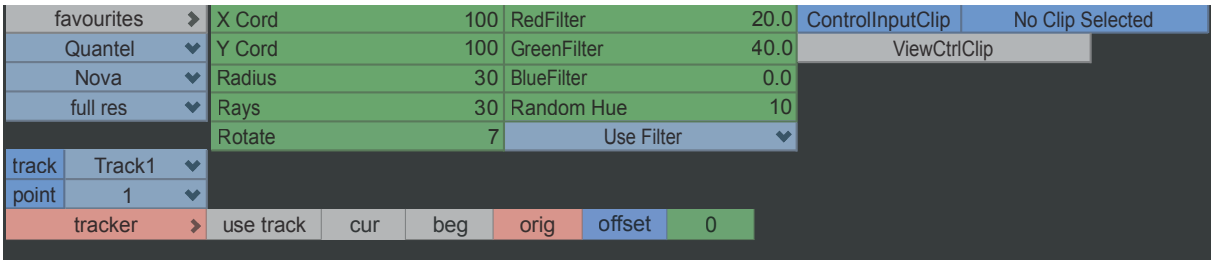
Using Tracker Settings Clips in Plug-ins

A tracker settings clip can be applied to a number of plug-ins including Quantel's **Crash Zoom**, **Kaleidoscope**, **Magic Crystal**, **MeshWarp**, **Nova**, **Ripple**, **Transition** and **Whirl Pinch**.

To apply a tracker settings clip to a plug-in do the following:

1. Select **plug-ins** and then the plug-in you want to use, eg **Nova**.
2. Adjust the plug-in settings as required.
3. Open the Settings Bin and locate the tracker settings clip you want to use.
4. Drag and drop the tracker settings clip onto the Edit Window. The track name automatically appears in the box to the right of **track** in the **plug-ins** menu See 'Behaviour of Settings Clips Types' previously in this chapter for details of loading different settings clips.



5. Select the point that you want to want to use the tracking data from in the **point** scroll box.
6. Press **use track**. The plug-in effect now uses the movement of the selected track. You can change the point or the track by using the **track** and **point** scroll boxes and pressing **use track** again.

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Appendices

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Appendix A

About This Manual

This guide covers software available on some Quantel stand-alone and server-connected systems. It may cover functions or options not available on the system you are using.

This guide was written and published by Quantel. The bottom of each page displays the guide's reference number, eg **2140-57-018** plus a revision letter, eg **B** (B being more recent than A which is the original). The publish date is also indicated in the format **mm/yy**. If you require hard copies of this guide, always quote the reference number, revision letter and title.

2140-57-027 revision	**publish date**	*ECO (Quantel use only)*	**software version**
A	**09/13**	**E45002**	**V5.3**

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Notices

Maintenance

warning (wm2) service personnel – maintenance and calibration within THE equipment enclosure is only to be carried out by service personnel (12/97)

Conventions Used

Symbols

See: Reference to other items in this document or in other documents.

Notes: System, software and workflow points to consider and remember.

Tips: Useful hints and advice when undertaking tasks.

Information: Additional hardware or software information which may be useful.

Cautions: Indicate possible damage to (or misalignment of) the equipment if the indicated statements are ignored or the indicated procedures are not followed correctly.

warnings: indicate danger to life and limb if the indicated statements are ignored, or the indicated procedures are not followed correctly.

Text

<Text>	indicates a specific key press on the QWERTY keyboard.
NN/nn	indicates a value entered on a numeric keypad.
Text/text	indicates either a Quantel control panel function or a Windows/Quantel installation/system setting.

Trademarks

Most of the product names mentioned in this manual are manufacturer trademarks and are used within this manual only for the purpose of identification:

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